

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

CLAIM 1 (Canceled):

CLAIM 2 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein first and second nodes are electronic devices.

CLAIM 3 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein first and second switching devices are electronic devices selected from the group consisting of repeaters, hubs, routers, bridges, and switches.

CLAIM 4 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein the star segment further comprises a third node connected to a third port located on the first switching device.

CLAIMS 5-8 (Canceled):

CLAIM 9 (Previously Presented):

2 The computer operable method as recited in claim 23, providing first and second nodes are electronic devices.

CLAIM 10 (Previously Presented):

2 The computer operable method as recited in claim 23, providing first and second switching devices are electronic devices selected from the group consisting of repeaters, hubs, routers, bridges, and switches.

CLAIM 11 (Previously Presented):

2 The computer operable method as recited in claim 23, providing the star segment further comprises a third node connected to a third port located on the first switching device.

CLAIMS 12-15 (Canceled):

CLAIMS 16-18 (Canceled):

CLAIM 19 (Currently Amended):

A program storage medium readable by a computer, tangibly

2 embodying a ~~software~~ computer program of instructions executable by
the computer ~~to perform method steps~~ for automatically specifying a
4 topological map, wherein the topological map describes the
connectivity of nodes on a computer network, wherein the network
6 comprises a first switching device having a first port, ~~said steps~~ the
instructions comprising:
8
if ~~connection of a first node to the first port is detected:~~ detecting
10 connection of a first node to the first port;
12 if connection of a second node to the first port ~~has been~~ was
previously ~~detected,~~ detected:
14
specifying that the ~~topology~~ topological map of the network
16 comprises a bus segment attached to the first port, wherein the
bus segment comprises the first port, the first node, the second
18 node, and that part of the network interconnecting the first port,
the first node, and the second ~~node;~~ node,
20
otherwise, if the first node is a second port located on a second
22 switching ~~device;~~ device:
24
specifying that the ~~topology~~ topological map of the network
comprises a serial segment attached to the first port, wherein
26 the serial segment comprises the first port, the second port, and
that part of the network interconnecting the first port and the
28 second ~~port;~~ port, and
30
~~otherwise,~~ otherwise:
32
specifying that the ~~topology~~ topological map of the network
comprises a star segment attached to the first port, wherein the
34 star segment comprises the first port, the first node, and that
part of the network interconnecting the first port and the first
36 ~~node;~~ node; and
38
using the topological map to control the flow of messages on the
network.
40

CLAIM 20 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein the
method step specifying that the topology of the network comprises the
4 bus segment attached to the first port comprises:
6
if the bus segment is absent, specifying the bus segment;

if the serial segment was previously specified:

8
10 transferring the second node and the first port from the
previously specified serial segment to the bus segment,
12 deleting the previously specified serial segment, and
14 adding the first node to the bus segment;

16 otherwise, if the star segment was previously specified:

18 transferring the second node from the previously specified star
segment to the bus segment,
20 deleting the previously specified star segment, and
22 adding the first node to the bus segment; and
24

otherwise, adding the first node to the bus segment.

CLAIM 21 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein the
method step specifying that the topology of the network comprises the
serial segment attached to the first port comprises:

4 specifying the serial segment;
6 adding the first node to the serial segment; and
8 adding the first port to the serial segment.

CLAIM 22 (Previously Presented):

2 The program storage medium as recited in claim 19, wherein the
method step specifying that the topology of the network comprises the
star segment attached to the first port comprises:

4 specifying the star segment;
6 adding the first node to the star segment; and
8 adding the first port to the star segment.

CLAIM 23 (Currently Amended):

2 A computer operable method for automatically specifying creating a
topological map, wherein the topological map describes the
connectivity of nodes on a computer network, wherein the network
4 comprises a first switching device having a first port, ~~comprising the~~

steps of: comprising:

~~if connection of a first node to the first port is detected:~~ detecting
connection of a first node to the first port;

if connection of a second node to the first port ~~has been~~ was
previously ~~detected;~~ detected:

specifying that the ~~topology~~ topological map of the network
comprises a bus segment attached to the first port, wherein the
bus segment comprises the first port, the first node, the second
node, and that part of the network interconnecting the first port,
the first node, and the second ~~node;~~ node,

otherwise, if the first node is a second port located on a second
switching ~~device;~~ device:

specifying that the ~~topology~~ topological map of the network
comprises a serial segment attached to the first port, wherein
the serial segment comprises the first port, the second port, and
that part of the network interconnecting the first port and the
second ~~port;~~ port, and

~~otherwise;~~ otherwise:

specifying that the ~~topology~~ topological map of the network
comprises a star segment attached to the first port, wherein the
star segment comprises the first port, the first node, and that
part of the network interconnecting the first port and the first
~~node;~~ node; and

using the topological map to control the flow of messages on the
network.

CLAIM 24 (Previously Presented):

The computer operable method as recited in claim 23, the method step
specifying that the topology of the computer network comprises the
bus segment attached to the first port comprising:

if the bus segment is absent, specifying the bus segment;

if the serial segment was previously specified:

transferring the second node and the first port from the
previously specified serial segment to the bus segment,

deleting the previously specified serial segment, and

14 adding the first node to the bus segment;
16 otherwise, if the star segment was previously specified:
18 transferring the second node from the previously specified star
20 segment to the bus segment,
22 deleting the previously specified star segment, and
24 adding the first node to the bus segment; and
otherwise, adding the first node to the bus segment.

CLAIM 25 (Previously Presented):

2 The computer operable method as recited in claim 23, wherein the
method step specifying that the topology of the network comprises the
4 serial segment attached to the fort port comprises:
6 specifying the serial segment;
8 adding the first node to the serial segment; and
adding the first port to the serial segment.

CLAIM 26 (Previously Presented):

2 The computer operable method as recited in claim 23, wherein the
method step specifying that the topology of the network comprises the
4 star segment attached to the first port comprises:
6 specifying the star segment;
8 adding the first node to the star segment; and
adding the first port to the star segment.

CLAIM 27 (Cancelled):